

In the Claims

Please amend the claims as follows:

1-53 (Cancelled)

54. (Withdrawn) A method of producing substrates, the method comprising:
- a) providing a substrate having generally-opposed interior and exterior surfaces;
 - b) forming a durable coating upon the exterior surface of the substrate, said coating comprising material that is durable to a selected washing fluid; and
 - c) sputtering a temporary protective cover over the durable coating, the cover comprising material that protects the durable coating against contamination but that can readily be removed by washing with the selected washing fluid.
55. (Withdrawn) The method of claim 54 wherein the durable coating is formed by sputtering.
56. (Withdrawn) The method of claim 54 wherein the durable coating is a hydrophilic coating deposited by sputtering a silicon target in an oxidizing atmosphere.
57. (Withdrawn) The method of claim 54 wherein the durable coating is a photocatalytic coating depositing by sputtering a titanium-containing target.
58. (Withdrawn) The method of claim 54 wherein the temporary protective cover is formed by sputtering upon the durable coating an oxide of a metal selected from the group consisting of zinc, bismuth, cadmium, iron, and nickel.
59. (Withdrawn) The method of claim 54 wherein the temporary protective cover is durable to elevated temperatures on the order of about 600°C, the method further comprising tempering the covered substrate.

60. (Withdrawn) The method of claim 54 further comprising incorporating the covered substrate into an insulating glass unit.
61. (Withdrawn) The method of claim 54 further comprising delivering the covered substrate to a customer.
62. (Withdrawn) The method of claim 54 further comprising installing the covered substrate in a window frame.
63. (Withdrawn) A method of processing substrates, the method comprising:
- a) providing a substrate having an exterior surface that is durable to a selected washing fluid, the exterior surface carrying a temporary protective cover comprising a sputtered film that protects the exterior surface against contamination but that can readily be removed from the exterior surface by washing with the selected washing fluid; and
 - b) washing the covered exterior surface of the substrate with the selected washing fluid to remove at least a portion of the cover, thereby exposing at least a portion of the underlying exterior surface.
64. (Withdrawn) The method of claim 63 wherein said washing fluid comprises a mild acid or a mild base.
65. (Withdrawn) The method of claim 64 wherein said washing fluid comprises vinegar.
66. (Withdrawn) The method of claim 65 wherein said washing removes substantially the entire cover.
67. (Withdrawn) The method of claim 66 further comprising incorporating the covered substrate into an insulating glass unit prior to said washing step.
68. (Withdrawn) The method of claim 66 further comprising delivering the covered substrate to a customer prior to said washing step.

69. (Withdrawn) The method of claim 66 further comprising installing the covered substrate in a window frame prior to said washing step.

70. (Withdrawn) The method of claim 66 wherein the cover is durable to elevated temperatures on the order of about 600°C, the method further comprising tempering the covered substrate.

71. (Currently Amended) A window assembly comprising:

a) a window pane having an exterior surface that is durable to a selected washing fluid, the exterior surface carrying a temporary protective cover comprising a sputtered film that can readily be removed by washing with the selected washing fluid, the temporary protective cover being durable to glass tempering, wherein the window pane has an interior surface carrying a low-emissivity coating; and

b) a window frame to which the pane is secured by a bead of sealant, the bead of sealant being bonded on a first side directly to a peripheral portion of the protective cover, said peripheral portion of the cover overlying a peripheral region of the pane's exterior surface, the bead of sealant being bonded on a second side to the window frame.

72. (Original) The window assembly of claim 71 wherein cover has been removed from a central portion of the pane's exterior surface.

73. (Withdrawn) A method of processing substrates, the method comprising:

a) providing a substrate having an interior surface and an exterior surface and a sputtering line comprising a series of connected sputtering chambers, each chamber having a substrate support positioned therein, a first sputtering chamber comprising a first lower target positioned below the support in the first chamber, a second sputtering chamber comprising a second lower target positioned below the support in the second chamber;

b) positioning the substrate on the support in the first sputtering chamber such that the exterior surface of the substrate is oriented toward the first lower target, and sputtering the

first lower target to deposit a first coating onto the exterior surface of the substrate, the first coating comprising material that is durable to a selected washing fluid; and

c) positioning the substrate on the support in the second sputtering chamber such that the exterior surface is oriented toward the second lower target, and sputtering the second lower target to deposit a second coating onto the first coating, the second coating comprising material that can readily be removed from the first coating by washing with the selected washing fluid.

74. (Withdrawn) The method of claim 73 wherein the first coating is a hydrophilic coating and the first lower target comprises silicon, wherein the first lower target is sputtered in an oxidizing atmosphere.

75. (Withdrawn) The method of claim 73 wherein the first coating is a photocatalytic coating and the first lower target comprises titanium, wherein the first lower target is sputtered in an atmosphere comprising inert gas or inert gas and oxygen.

76. (Withdrawn) The method of claim 73 wherein the second coating is a temporary protective cover and the second lower target comprises a metal, wherein the second lower target is sputtered in an oxidizing atmosphere.

77. (Withdrawn) The method of claim 73 wherein the second coating is a temporary protective cover and the second lower target comprises a metal selected from the group consisting of zinc, bismuth, cadmium, iron, and nickel, wherein the second lower target is sputtered in an oxidizing atmosphere.

78. (Withdrawn) The method of claim 73 wherein the second coating is a temporary protective cover and the second lower target comprises zinc, wherein the second lower target is sputtered in an oxidizing atmosphere.

79. (Withdrawn) The method of claim 73 further comprising a downward sputtering chamber having an upper target positioned above the support therein, the upper target being sputtered to

deposit an interior coating on the interior surface of the substrate or on a film previously deposited upon the interior surface.

80. (Withdrawn) The method of claim 79 wherein the interior coating is low-emissivity coating or a film forming part of a low-emissivity coating and the upper target comprises a metal, wherein the upper target is sputtered in an oxidizing atmosphere.

81. (Withdrawn) The method of claim 73 further comprising a dual-direction sputtering chamber having a second upper target positioned above the support therein and having a third lower target positioned below the support therein, the second upper target and the third lower target being sputtered at substantially the same time.

82. (Previously Presented) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating and the exterior surface carries a temporary protective cover that protects the exterior surface against contamination, the temporary protective cover being stable in the presence of water and being durable to glass tempering but breaking down in the presence of a mild acid or a mild base.

83. (Previously Presented) The substrate of claim 82, wherein the cover is formed of inorganic material.

84. (Previously Presented) The substrate of claim 82, wherein the cover has a thickness of less than about 100Å.

85. (Previously Presented) The substrate of claim 84, wherein the cover has a thickness of at least about 25Å.

86. (Previously Presented) The substrate of claim 82, wherein the substrate is installed in a position wherein said covered exterior surface is exposed to an outdoor environment.

87. (Previously Presented) The substrate of claim 82, wherein the substrate is part of a multiple-pane insulating glass unit having confronting surfaces that bound a between-pane space, wherein said interior surface carrying the low-emissivity coating is one of the confronting surfaces of the insulating glass unit, and wherein said exterior surface carrying the temporary protective cover is oriented away from the between-pane space of the insulating glass unit.

88. (Previously Presented) The substrate of claim 82, wherein the cover is formed of a sputtered metal oxide selected from the group consisting of zinc oxide, bismuth oxide, cadmium oxide, iron oxide, and nickel oxide.

89. (Previously Presented) The substrate of claim 82, wherein the cover comprises zinc oxide.

90. (Previously Presented) The substrate of claim 82, wherein said exterior surface is formed by the substrate itself.

91. (Previously Presented) The substrate of claim 82, wherein said exterior surface is formed by a durable coating on the substrate.

92. (Previously Presented) The substrate of claim 82, wherein the cover has a thickness of between about 25Å and about 60Å.

93. (Previously Presented) The substrate of claim 82, wherein the cover breaks down in the presence of vinegar.

94. (Previously Presented) The substrate of claim 82, wherein the low-emissivity coating comprises, moving outwardly from the substrate, at least one dielectric layer, a metal layer, and a further dielectric layer.

95. (Previously Presented) The substrate of claim 94, wherein the metal layer comprises silver.

96. (Currently Amended) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating and the exterior

surface carries a temporary protective cover that protects the exterior surface against contamination, the temporary protective cover being stable in the presence of water and durable to glass tempering but breaking down in the presence of a mild acid or a mild base, and wherein the temporary protective cover is formed of an inorganic material.

97. (Currently Amended) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating and the exterior surface carries a temporary protective cover that protects the exterior surface against contamination, the temporary protective cover being stable in the presence of water and durable to glass tempering but breaking down in the presence of a mild acid or a mild base, and wherein the temporary protective cover has a thickness of at least about 25Å but less than about 100Å.

98. (Currently Amended) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating and the exterior surface carries a temporary protective cover that protects the exterior surface against contamination, the temporary protective cover being stable in the presence of water and durable to glass tempering but breaking down in the presence of a mild acid or a mild base, and wherein the temporary protective cover is formed of a sputtered metal oxide selected from the group consisting of zinc oxide, bismuth oxide, cadmium oxide, iron oxide, and nickel oxide.

99. (Currently Amended) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating comprising, moving outwardly from the substrate, at least one dielectric layer, a metal layer, and a further dielectric layer, and wherein the exterior surface carries a temporary protective cover that protects the exterior surface against contamination, the temporary protective cover being durable to glass tempering and having a thickness of at least about 25Å but less than about 100Å and being formed of a sputtered metal oxide selected from the group consisting of zinc oxide, bismuth oxide, cadmium oxide, iron oxide, and nickel oxide.

100. (Currently Amended) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating, wherein the exterior surface carries a temporary protective cover that protects the exterior surface against contamination, the temporary protective cover being durable to glass tempering and having a thickness of at least about 25Å but less than about 100Å and being formed of a sputtered metal oxide selected from the group consisting of zinc oxide, bismuth oxide, cadmium oxide, iron oxide, and nickel oxide, wherein the substrate is part of a multiple-pane insulating glass unit having confronting surfaces that bound and are oriented toward a between-pane space, and wherein said exterior surface carrying the temporary protective cover is oriented away from said between-pane space.

101. (Currently Amended) A sheet-like substrate having two generally-opposed major surfaces, one of the major surfaces being an interior surface, the other major surface being an exterior surface, wherein the interior surface carries a low-emissivity coating and the exterior surface bears a hydrophilic coating carrying a temporary protective cover that protects the hydrophilic coating against contamination, the temporary protective cover being stable in the presence of water and durable to glass tempering but breaking down in the presence of a mild acid or a mild base, and wherein the temporary protective cover has a thickness of at least about 25Å but less than about 100Å and comprises a metal oxide selected from the group consisting of zinc oxide, bismuth oxide, cadmium oxide, iron oxide, and nickel oxide.